

Call for Papers

Next-Generation Mobile Networks and Connected Systems

Track Co-Chairs

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Scope and Motivation

The rapid evolution of mobile communication technologies continues to reshape how people and devices connect, compute, and interact. With the global deployment of 5G underway and research into 6G and beyond, the mobile networking landscape is entering a new era, characterized by ultra-low latency, massive connectivity, high reliability, and deep integration with AI, edge computing, and novel hardware platforms. These advances pose new challenges and opportunities across the protocol stack, from the physical layer to system-level design and application support.

This track seeks to bring together researchers and practitioners working on next-generation mobile networks and systems to present innovations and emerging technologies that will define the future of mobile connectivity. We welcome contributions that address fundamental research challenges, prototype novel systems, and explore real-world deployments that push the limits of performance, scalability, and intelligence in mobile networks.

Topics of Interest

Our track seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Architectures for 5G-Advanced, 6G, and beyond
- AI/ML-driven mobile network optimization and control
- Spectrum sharing and dynamic spectrum access
- Open RAN (O-RAN) and programmable radio access networks
- Emerging mobile applications (AR/VR, Smart city, etc.)
- Cross-layer design for ultra-reliable low-latency communications (URLLC)
- Integrated sensing and communication
- Energy-efficient mobile systems and hardware acceleration
- Security, privacy, and trust in mobile networks
- Experimental testbeds, measurement, and real-world evaluations
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Important Dates

Paper Submission: 2025-08-15

Notification: 2025-10-01

Camera Ready and Registration: 2025-10-15

How to Submit a Paper

Each submission should include the authors' names, affiliations, an abstract, and 5–10 keywords. Papers are limited to 8 pages, including figures and references. Up to two additional pages may be included with an overlength charge. Full instructions on how to submit papers are provided on the IEEE ICPADS 2025 website: <http://ieee-icpads.org.cn/CFP-research-paper.html>